

Notice of Allowability

Application No.

09/886,700

Examiner

Alton N. Pryor

Applicant(s)

HIGHSMITH ET AL.

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/18/07.
2. ☒ The allowed claim(s) is/are 1-18,39,40 (claims renumbered 1-20).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

Art Unit: 1616

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Roberts on 9/18/07.

The application has been amended as follows:

In the claims:

1. (CURRENTLY AMENDED) A stable agricultural solids suspension readily dispersible in water, the suspension comprising:

- a. agricultural solids comprising ~~consisting essentially of~~ at least one member ~~selected from the group consisting of a fertilizer, a combination of an adjuvant and a herbicide, a herbicide, and a pesticide, and combinations thereof~~, said agricultural solids having particles ~~more than~~ at least 99 wt.% passable through a Tyler #48 sieve;
- b. a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C₁₁ to C₁₅ alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids;
- c. a water-soluble glycol liquid consisting of at least one member of selected from the group consisting of ethylene glycol, and propylene glycol; and
- d. methylthio- α -hydroxybutyric acid.

2. (ORIGINAL) The agricultural solids suspension of Claim 1, wherein the concentration of the agricultural solids is between about 20 wt.% and 80 wt.%; the concentration of the glycol liquid is between about 20 wt.% and about 80 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.

3. (ORIGINAL) The agricultural solids suspension of Claim 1, wherein the concentration of the agricultural solids is between about 50 wt.% and about 70 wt.%; the concentration of the glycol liquid is between about 30 wt. % and about 50 wt.%; and the concentration of the non-ionic surfactant is between about 2.5 wt.% and 6.5 wt.%.

4. (CURRENTLY AMENDED) The agricultural solids suspension of Claim 1, wherein the agricultural solids ~~consist of~~ comprise at least one member ~~of~~ selected from the group consisting of ammonium sulfate ((NH₄)₂SO₄), diammonium phosphate ((NH₄)₂HPO₄) and the isopropylamine salt of N-(phosphonomethyl) glycine.

5. (ORIGINAL) The agricultural solids suspension of Claim 1, wherein the molecular weight of the non-ionic surfactant is between about 300 and 1000.

6. (ORIGINAL) The agricultural solids suspension of Claim 1, wherein the non-ionic surfactant is selected from the group consisting of dodecylphenoxy poly(ethylene oxide)_{9,5-11} ethanol, dodecylphenoxy poly(ethylene oxide)₉ ethanol, octylphenoxy poly(ethylene oxide)₇ ethanol, octylphenoxy poly(ethylene oxide)₅ ethanol, and nonylphenoxy poly(ethylene oxide)₄.

7. (ORIGINAL) The agricultural solids suspension of Claim 1, wherein the non-ionic surfactant is selected from the group consisting of a C₁₂-C₁₄ secondary aliphatic alcohol (ethoxylate)₉, a C₁₂-C₁₄ secondary alcohol (ethoxylate)₁₂, undecanol (ethoxylate)₉ and oleyl (ethoxylate)₁₀.

8. (ORIGINAL) The agricultural solids suspension of Claim 1, wherein the non-ionic surfactant is dodecylphenoxy poly(ethylene oxide)_{9,5-11} ethanol.

Art Unit: 1616

9. (ORIGINAL) The agricultural solids suspension of Claim 1, wherein the glycol liquid is propylene glycol.

10. (PREVIOUSLY PRESENTED) A stable suspension of ammonium sulfate $((\text{NH}_4)_2\text{SO}_4)$ readily dispersible in water, the suspension comprising:

- a. ammonium sulfate particles ~~more than~~ at least 99 wt.% passable through a Tyler #48 sieve;
- b. a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C_{11} to C_{15} alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids;
- c. a water-soluble glycol liquid consisting of at least one member ~~of~~ selected from the group consisting of ethylene glycol, and propylene glycol; and
- d. methylthio- α -hydroxybutyric acid.

11. (ORIGINAL) The ammonium sulfate suspension of Claim 10, wherein the concentration of the agricultural solids is between about 30 wt.% and 70 wt.%; the concentration of the glycol liquid is between about 30 wt.% and about 70 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.

12. (ORIGINAL) The ammonium sulfate suspension of Claim 10, wherein the concentration of the ammonium sulfate is between about 40 wt.% and 70 wt.%; the concentration of the glycol liquid is between about 30 wt.% and about 60 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.

13. (ORIGINAL) The ammonium sulfate suspension of Claim 10, wherein the concentration of the ammonium sulfate is between about 50 wt.% and about 70 wt.%; the concentration of the glycol liquid is between about 30 wt. % and about 50 wt.%; and the concentration of the non-ionic surfactant is between about 2.5 wt.% and 6.5 wt.%.

14. (ORIGINAL) The ammonium sulfate suspension of Claim 10, wherein the non-ionic surfactant has a molecular weight between about 300 and about 1000.

15. (ORIGINAL) The ammonium sulfate suspension of Claim 10, wherein the non-ionic surfactant is selected from the group consisting of dodecylphenoxy poly(ethylene oxide)_{9.5-11} ethanol, dodecylphenoxy poly(ethylene oxide)₉ ethanol, octylphenoxy poly(ethylene oxide)₇ ethanol, octylphenoxy poly(ethylene oxide)₅ ethanol, and nonylphenoxy poly(ethylene oxide)₄.

16. (ORIGINAL) The agricultural solids suspension of Claim 10, wherein the non-ionic surfactant is selected from the group consisting of a C₁₂-C₁₄ secondary aliphatic alcohol (ethoxylate)₉, a C₁₂-C₁₄ secondary alcohol (ethoxylate)₁₂, undecanol (ethoxylate)₉ and oleyl (ethoxylate)₁₀.

17. (ORIGINAL) The ammonium sulfate suspension of Claim 10, wherein the non-ionic surfactant is dodecylphenoxy poly(ethylene oxide)_{9.5-11} ethanol.

18. (ORIGINAL) The ammonium sulfate suspension of Claim 10, wherein the glycol liquid is propylene glycol.

19-38. (CANCELED).

39. (NEW) The stable agricultural solids suspension of claim 1 further comprising an adjuvant.

40. (NEW) The stable suspension of claim 10 further comprising an adjuvant.

Reason for Allowance

The following is an examiner's statement of reasons for allowance: The prior art does not teach or suggest the instant composition comprising methylthio-alpha-hydroxybutyric acid.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Alton Pryor', is positioned above the printed name.

Alton Pryor
Primary Examiner
AU 1616